In the Claims

Claims

1. (Currently Amended) A power injector system for use with a magnetic resonance imaging system installed at least in part within an electromagnetic interference shielded room electrically accessible via a penetration panel, the power injector system comprising:

a power head adapted for operation within the shielded room to controllably inject a compound into a patient;

power supply for operation outside the shielded room to receive utility electrical power; and

a power connection configured to couple electrical power through the penetration panel between the power supply outside of the shielded room and the power head for actuating the power head.

2. (Currently Amended) The power injector system of claim 1, further comprising

a control panel for generating data signals to control said power head adapted for operation outside the shielded room;

said power connection further coupling said data signals from said control panel to said power head for controlling said power head ~~a power control adapted for operation~~

~~within the shielded room interposed between the power supply and the power head, the power control operable to selectively actuate the power head with power received via the power connection from the power supply~~.

3. (Currently Amended) A method of converting a battery-powered magnetic resonance (MR) injector system in a shielded magnet room to a remotely powered MR injector system, the method comprising:

placing a power supply outside of the shielded magnet room, the power supply coupled to an AC outlet for electrical power;

replacing ~~a pair of~~ shielded ~~electrical~~ cables ~~having conductors~~ adapted for carrying data signals with ~~a pair of~~ replacement shielded ~~electrical~~ cables having conductors adapted for electrical power transmission and ~~having conductors~~ further adapted for carrying data signals, wherein one replacement cable positioned outside the magnet room couples the power supply to a penetration panel and the other replacement cable positioned inside the magnet room couples to the penetration panel to be in ~~electrical~~ communication with the first cable; and

modifying a ~~power control~~ MR injector system in ~~a~~ said shielded magnet room to electrically couple power transmission from conductors of the replacement shielded cables to ~~terminals of a~~ conductors for receiving battery ~~receptacle in the~~ power ~~control~~ in said MR injector system.

4. (Currently Amended) The method of claim 3, further comprising:

in the power supply, relaying data signals from a console in the control room to the ~~data conductors of the electrical~~ a replacement shielded cable outside of the shielded magnet room ~~via a datalink in the power supply~~.

5. (Original)

The method of claim 3, further comprising:

in the power supply, coupling AC electrical power from an AC outlet to an AC outlet externally mounted on the power supply for powering the console.